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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT Application of
SHIRAISHI *et al.*

Group Art Unit: 3724

Application No. 10/783,022

Examiner: Payer

Filed: February 23, 2004

For: DEVICE FOR REMOVING COATING ON OPTICAL FIBER

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January 24, 2007

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief is filed in response to the Examiner's Answer mailed November 30, 2006. This Reply Brief is timely filed within two months from the November 30, 2006 mailing date of the Examiner's Answer.

On pages 5-6 of the Examiner's Answer, the Examiner states:

Appellants argue, at page 5 of the brief, the claimed invention is a device for removing the covering layer of an optical fiber. In contrast, Siden teaches a device for removing insulation from a metal wire that conducts electricity. There is a vast difference between devices used for stripping electrical insulation (Siden) and devices for stripping the covering layer of an optical fiber (present invention). Thus, one of ordinary skill in the art would not be motivated to look to wire stripping device (Siden) to make a device for removing the outer layer of an optical fiber. For this reason alone, the Section 103 rejection should be withdrawn. Examiner disagrees. Indeed, Siden does explicitly state fiber optics materials may be stripped by the device (see column 2, lines 56-57) just as Appellants' device is intended for.

Appellants respectfully submit that the Title, abstract, background section,

and the majority of the written specification of Siden teach a “wire stripper” and stripping of “wire insulation.” Appellants have reviewed column 2, lines 56-57 of Siden, pointed out by the Examiner, which teaches that “optics materials” can be stripped using the wire stripper. Even if this language is interpreted to include “optical fibers,” Siden still does not teach or suggest the claimed invention for the many reasons of record and for the following reasons. In summary, see page 6 of Appellants’ Appeal Brief, which demonstrates that Siden requires a sharp “edge,” which is very different from the claimed “edge” having an edge angle that is substantially 90°, i.e. not sharp. See also the pictures of the “edge” according to the present invention compared to the “edge” of Siden on page 6 of the Appeal Brief. For this reason alone, the Section 103 rejection should be withdrawn.

The Examiner argues on page 6 of the Examiner’s Answer that:

Appellants argue, at pages 6-8 of the brief, Siden’s blades taper down to a sharp edge and do not have an edge surface substantially perpendicular to side surfaces of the cutting blades as claimed. In response, Siden’s edge surfaces of the cutting blades (24/26/34) have been interpreted as the edges that are received in recesses of blocks (20/22/32, see Figs.2 and 4). Appellants argue the claimed edge of the blade is “the cutting surface that contacts the optical fiber”, and claims should be interpreted in light of the specification. In response, Examiner finds the alleged limitation is not in the claims. Further, claims are to be given their “broadest reasonable interpretation” during prosecution, and limitations found in specification should not be imported or read into claims. The specification is not the measure of invention. Therefore, limitations contained therein cannot be read into the claims for the purpose of avoiding the prior art.

The claimed invention specifically recites that each cutting blade has an “edge surface.” It is well known in the art that a cutting blade has an “edge” for cutting and a handle to hold the cutting blade. The term “edge” of a cutting blade is well defined and has a commonly accepted meaning. On page 8 of the Appeal Brief, Appellants properly cited the present specification to demonstrate that they are only using the term “edge” in its customary and known meaning, not to introduce any limitations into the claims. See

Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), which states that claim terms are interpreted using “intrinsic” evidence, including the literal language of the claim term, the patent specification, and the prosecution history, and that extrinsic evidence can also be consulted, such as a dictionary. However, extrinsic evidence can never be used to contradict the specification or customary meaning of the claim term. Common dictionaries, such as Webster's, defines an edge as “the cutting side of a blade.”

The Examiner now unreasonably interprets the claim term “edge” to mean something other than its ordinary and customary meaning. The Examiner attempts to now argue that the handle of a cutting blade is an edge, without citing even one reference that shows holding a cutting blade by the edge and cutting with the handle. The “edges that are received in recesses of blocks (20/22/32, see Figs.2 and 4)” of Siden is the handle of the cutting blade and cannot be used to cut, i.e. it is not the “edge” that is used to cut. The Examiner provides no support for his interpretation of the “edge” of a cutting blade to now mean the handle. For this reason alone, the Examiner has not provided a prima facie case of obviousness and Section 103 rejection should be withdrawn.

The Examiner argues on pages 6-7 of the Examiner's Answer that:

Appellants' arguments (items a and b at pages 8-9 of the brief) regarding to the thickness and the bending elasticity are not persuasive. Since Siden's plastic cutting blade is made of the same material (polycarbonate, polystyrene, acrylonitrilebutadiene-styrene) as Appellants disclosed (see page 5 of the specification), and further Siden's cutting blades (34,24,26) do have a thickness and a bending elasticity. To select a certain thickness range and a bending elasticity range for Siden's cutting blades such as in the range of 0.06 - 1 mm and in the range of 900 - 20,000 MPa, respectively, would have been obvious to one having ordinary skill in the art, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233 (CCPA 1955).

Appellants respectfully submit that one cannot optimize what is not taught. Siden

does not teach a cutting blade having the claimed "edge" and, thus, one cannot optimize the size and properties of the claimed cutting blade.

The Examiner argues on pages 7-8 of the Examiner's Answer that:

Appellants also argue (items c and d at page 10 of the brief), Siden does not teach using a receiver body "sized such that when an optical fiber is set on a surface of said receiver body opposite to said cutting blade the length of the optical fiber is longer than the thickness of said cutting blade", and Siden does not teach or even suggest any guide means, and surely not a guide means for guiding optical fiber. Examiner disagrees with the arguments. First of all, Siden indeed does suggest the device is to be used for stripping optical fiber as claimed (note column 2, lines 56-57 in Siden). Further, Siden's receiver body (36) is sized such that when an optical fiber (40) is set on a surface of the receiver body (36) opposite to the cutting blade (34), the length of the optical fiber (40) is longer than the thickness of the cutting blade (34, see Siden's Fig.4) as claimed. Siden's element (15/16, see Fig.1) is interpreted as the claimed "guide means" since it is fully capable of guiding an optical fiber to a removing position between a receiver body and cutting blades as claimed.

Siden's receiver body 36 is not a guide because it is a flat surface. See column 5, lines 6-9 of Siden, which clearly states "anvil 36, should be made of a flat material..." A flat surface cannot guide an optical fiber to be stripped.

In contrast, see Fig. 6 and page 8, lines 19-24 of the present specification, which discloses a notch as an example of a guide, which can guide or position the optical fiber. For this reason, the Section 103 rejection should be withdrawn.

The Examiner argues on page 8 of the Examiner's Answer that:

Appellants' arguments (at pages 10-13) with respect to the JP '803 reference are basically the same as those with respect to the Siden reference, namely, the interpretation of the claimed edge surface, the ranges for the thickness and the bending elasticity of the cutting blade. Examiner's response to these arguments is the same as those for Siden's.

Appellants respectfully submit that the arguments they presented in their Appeal Brief regarding JP '803 are not merely "basically the same as those in respect to Siden."


Appellants provided detailed arguments showing how the claimed invention is not obvious over JP '803. In summary, as discussed on pages 11-12 of the Appeal Brief, JP '803 requires the use of a sharp "edge." In contrast, the claimed "edge" having an edge angle that is substantially 90°, i.e. not sharp. See also the pictures of the "edge" according to the present invention compared to the "edge" of Siden on page 11 of the Appeal Brief. For this reason alone, the Section 103 rejection should be withdrawn.

In view of the lack of *prima facie* case of obviousness, the many differences between the claimed invention and the cited references, and the unexpected advantages of the claimed invention, it is believed that this application clearly and patentably distinguishes over the combination of the cited references and is in proper condition for allowance. Accordingly, Appellants respectfully request that the Board allow claims 1-14 over the cited references.

Respectfully submitted,

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